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Pump Your Septic Tank Before Winter

Most septic tanks need cleaning about every three years.

If a few years have passed since your septic tank was pumped, now would be a good time to contact a licensed pumper and have it emptied, according to Tom Scherer, a North Dakota State University Extension Service agricultural engineer.

"Cleaning the accumulated solids - sludge - from the septic tank is the most common, routine maintenance needed for most individual home sewage treatment systems," says Scherer One clue that a septic tank has too much accumulated sludge and other material is that it smells if you are standing downwind from the house sewer vent. Ridding the septic tank of accumulated sludge will help prevent septic system problems during the winter. Fixing a failed or poorly performing septic system in the winter is difficult and expensive.

Most septic tanks need cleaning about every three years, Scherer says. However, the actual timing will depend on the quantity of solids entering the tank. The tank may have to be cleaned every one or two years if the home has a garbage disposal and it is used regularly. Using a garbage disposal significantly increases a septic tank's solids loading.

The septic tank's main purposes are to separate solids from liquids, allow bacteria to break down the solids and store the nondegradable solids until they can be removed. The drainfield provides additional bacterial degradation of the effluent from the septic tank and allows the effluent to infiltrate the soil. The bacteria that do this work in the septic tank and drainfield are common soil bacteria.

As sewage breaks down in the septic tank, some solids settle to the bottom and others float to the top. This separation usually produces three distinct layers, which are:



Top - Scum composed of cooking fats and oils, soap byproducts and products of decomposition are lighter than water and float to the top.

Middle - This layer consists of water containing very small pieces of waste. It's the effluent that is discharged to the drainfield.

Bottom - Sludge composed of decomposition byproducts, and soil from clothes washing and other materials are heavier than water.

On many farms, a fair portion of the sludge is the dirt that comes from washing clothes.

If you are not sure when the septic tank was pumped last, you can measure the depth of sludge in the tank to determine whether the tank needs to be cleaned. To do that:



Wrap 3 or 4 feet of white terry cloth or toweling, rough side out, around a wooden or metal pole. The pole should be long enough to reach to the bottom of the septic tank.

Slowly push the pole to the bottom of the tank through an inspection pipe or the manhole. The best place to measure is under the inspection pipe at the inlet to the septic tank because the sludge layer will be thickest there.

Turn the pole slowly three to five revolutions, let it sit for a minute, then slowly withdraw it.

Where the black particles cling to the rough cloth determines the sludge thickness. If the sludge is greater than 12 inches thick, have the tank cleaned, Scherer advises.

He also recommends that a licensed contractor pump the septic tank. Cleaning a tank is more than just pumping out the liquid. Pumping and back-flushing the liquid into the tank will break up the scum and sludge layers. The contractor then can pump the mixed contents from the tank and dispose of them in an approved method.

"Pumping a septic tank on a regular basis is much cheaper than using septic system additives and is much more effective," Scherer says.

Septic system additives have been sold since the 1880s, and more than 120 products that claim to improve septic system operations are on the market. However, 80-plus years of research has not

found evidence that they work, and some have been found to pollute groundwater.

Scherer suggests that if you put additives in your septic system, you should read the directions very carefully. Also make sure the additive is recommended for the problem you've noticed.



For more information on septic systems, check out the NDSU publication "Individual Home Sewage Treatment Systems." It's available at county Extension offices or online at http://tinyurl.com/NDSUsepticsystems.